

N*m (kgf*cm, ft.*lbf): Specified torque

c

REMOVAL

1. REMOVE BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY

HINT:

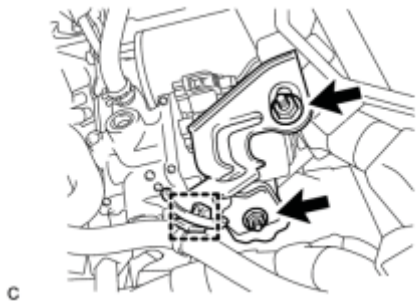
Refer to the procedure up to Remove Brake Booster with Master Cylinder Assembly **INFO**.

2. REMOVE FRONT CROSS MEMBER SUB-ASSEMBLY

HINT:

Refer to the procedure up to Remove Front Cross Member Sub-assembly **INFO**.

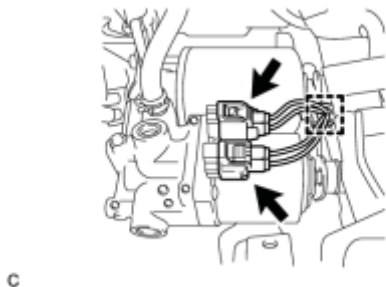
3. REMOVE NO. 5 BRAKE ACTUATOR BRACKET



(a) Remove the 2 nuts and No. 5 brake actuator bracket.

(b) Separate the wire harness clamp.

4. REMOVE BRAKE BOOSTER PUMP ASSEMBLY WITH BRACKET

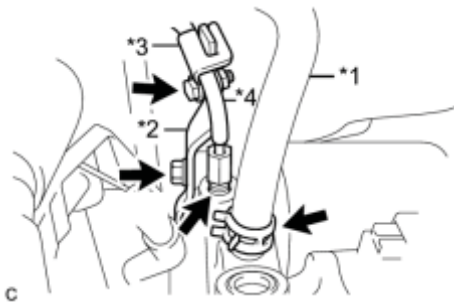


(a) Disconnect the 2 connectors and separate the clamp from the brake booster pump assembly.

(b) Remove the clip and brake actuator hose.

Text in Illustration

| | |
|----|------------------------|
| *1 | Brake Actuator Hose |
| *2 | No. 2 Brake Tube Clamp |

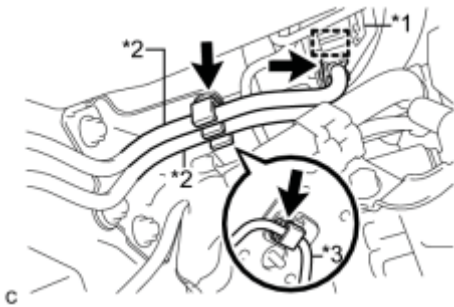


| | |
|----|------------------------|
| *3 | No. 1 Brake Tube Clamp |
| *4 | Front No. 1 Brake Tube |

(c) Remove the 2 bolts, No. 1 brake tube clamp and No. 2 brake tube clamp.

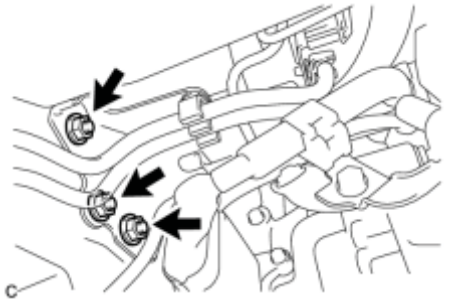
(d) Disconnect the front No. 1 brake tube.

(e) Separate the wire harness clamp, 2 fuel lines and front No. 4 brake tube from the brake booster pump assembly.



Text in Illustration

| | |
|----|------------------------|
| *1 | Wire Harness Clamp |
| *2 | Fuel Line |
| *3 | Front No. 4 Brake Tube |



(f) Remove the 3 nuts and brake booster pump assembly with bracket.

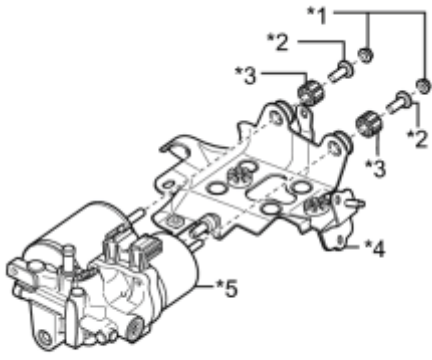
5. REMOVE BRAKE BOOSTER PUMP ASSEMBLY

(a) Remove the 2 nuts, brake booster pump bushings, brake actuator case collars and brake booster pump assembly from the brake actuator bracket assembly.

Text in Illustration

| | |
|----|---------------------------------|
| *1 | Nut |
| *2 | Brake Actuator Case Collar |
| *3 | Brake Booster Pump Bushing |
| *4 | Brake Actuator Bracket Assembly |

| | |
|----|-----------------------------|
| *5 | Brake Booster Pump Assembly |
|----|-----------------------------|



c

INSPECTION

1. INSPECT BRAKE BOOSTER PUMP ASSEMBLY

(a) Measure the resistance according to the value(s) in the table below.

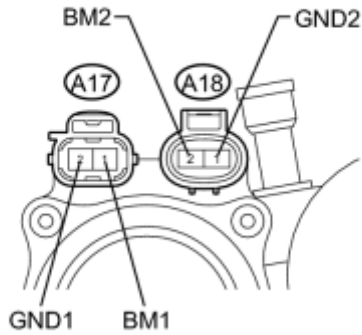
Standard Resistance:

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| A17-1 (BM1) - A17-2 (GND1) | Always | Below 10 Ω |
| A18-2 (BM2) - A18-1 (GND2) | Always | Below 10 Ω |
| A17-1 (BM1) - A18-2 (BM2) | Always | Below 1 Ω |
| A17-2 (GND1) - A18-1 (GND2) | Always | Below 1 Ω |

Text in Illustration

| | |
|----|---|
| *1 | Component without harness connected (Brake Booster Pump) |
|----|---|

*1



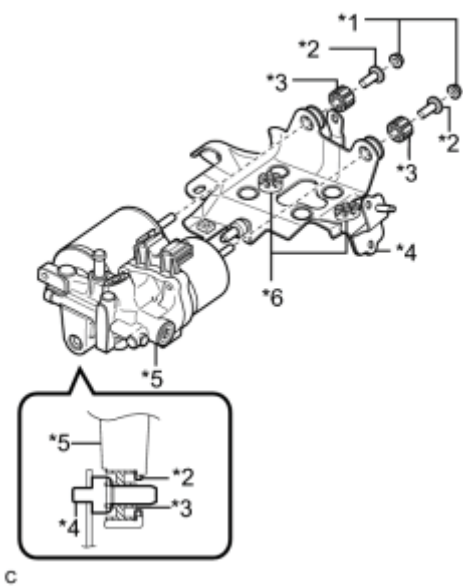
H

INSTALLATION

1. INSTALL BRAKE BOOSTER PUMP ASSEMBLY

(a) Install the brake booster pump assembly, brake booster pump bushings and brake actuator case collars to the brake actuator bracket assembly with the 2 nuts.

Text in Illustration



| | |
|----|---------------------------------|
| *1 | Nut |
| *2 | Brake Actuator Case Collar |
| *3 | Brake Booster Pump Bushing |
| *4 | Brake Actuator Bracket Assembly |
| *5 | Brake Booster Pump Assembly |
| *6 | Cushion |

Torque: **5.4 N·m (55 kgf·cm, 48in·lbf)**

- Do not drop the brake booster pump assembly when carrying it.
- Do not carry the brake booster pump assembly by the connector.
- Confirm that the 2 cushions are on the brake actuator bracket, bushings and collars on the brake booster pump assembly when assembling the brake booster pump assembly.
- Do not remove the hole plug before installing a new brake booster pump assembly because the brake booster pump assembly is filled with brake fluid.

2. INSTALL BRAKE BOOSTER PUMP ASSEMBLY WITH BRACKET

(a) Using SST, install the brake booster pump assembly with bracket with the 3 nuts.

SST: 09961-00950

without SST - Torque: **19 N·m (194 kgf·cm, 14ft·lbf)**

with SST - Torque: **12 N·m (121 kgf·cm, 9ft·lbf)**

- Use a torque wrench with a fulcrum length of 250 mm (9.84 in.).
- Tighten the 3 nuts in the order shown in the illustration.
- Do not damage the fuel line, the brake lines and wire harness.
- Use the formula to calculate special torque values for situations where the SST is combined with a torque wrench INFO.

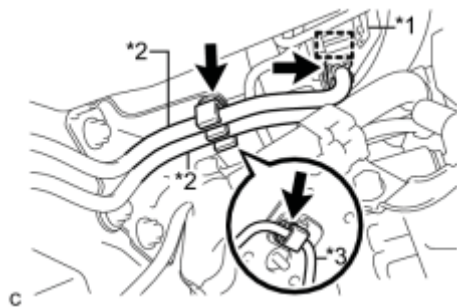


(b) Install the wire harness clamp, 2 fuel lines and front No. 4 brake tube to the brake booster pump assembly.

NOTICE:

Do not damage the fuel line, the brake lines and wire harness.

Text in Illustration



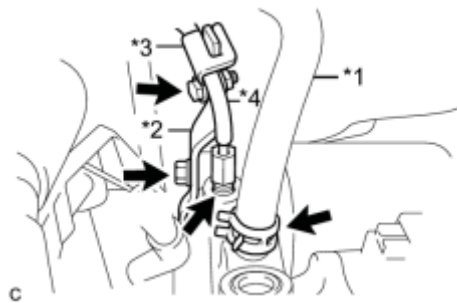
| | |
|----|------------------------|
| *1 | Wire Harness Clamp |
| *2 | Fuel Line |
| *3 | Front No. 4 Brake Tube |

(c) Connect the front No. 1 brake tube.

(1) Install the No. 2 brake tube clamp to the brake booster pump assembly with the bolt.

Torque: 7.0 N·m (71 kgf·cm, 62in·lbf)

Text in Illustration




| | |
|----|------------------------|
| *1 | Brake Actuator Hose |
| *2 | No. 2 Brake Tube Clamp |
| *3 | No. 1 Brake Tube Clamp |
| *4 | Front No. 1 Brake Tube |

(2) Install the front No. 1 brake tube to the brake booster pump assembly.

Torque: **15 N·m (155 kgf·cm, 11ft·lbf)**

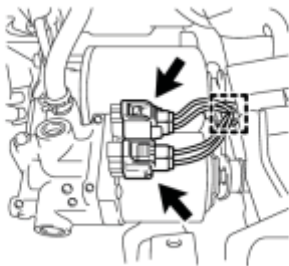
NOTICE:

- This torque value is effective when the union nut wrench is parallel to the torque wrench.
- Use the formula to calculate special torque values for situations where the union nut wrench is combined with a torque wrench .

(3) Install the No. 1 brake tube clamp to the brake booster pump assembly with the bolt.

Torque: **7.0 N·m (71 kgf·cm, 62in·lbf)**

(d) Install the brake actuator hose and clip.

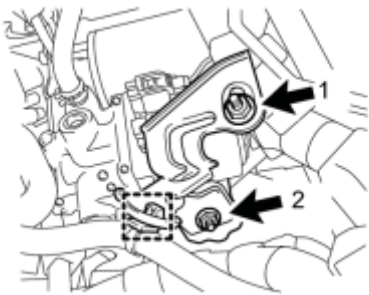


(e) Install the wire harness clamp.

c

(f) Connect the 2 connectors.

3. INSTALL NO. 5 BRAKE ACTUATOR BRACKET



(a) Install the No. 5 brake actuator bracket with the 2 nuts.

Torque: **8.5 N·m (87 kgf·cm, 75in·lbf)**

NOTICE:

Tighten the 2 nuts in the order shown in the illustration.

c

(b) Install the wire harness clamp.

4. INSTALL FRONT CROSS MEMBER SUB-ASSEMBLY

HINT:

Refer to the procedure from Install Front Cross Member Sub-assembly .

5. INSTALL BRAKE BOOSTER WITH MASTER CYLINDER ASSEMBLY

HINT:

Refer to the procedure from Install Brake Booster with Master Cylinder Assembly **INFO**.

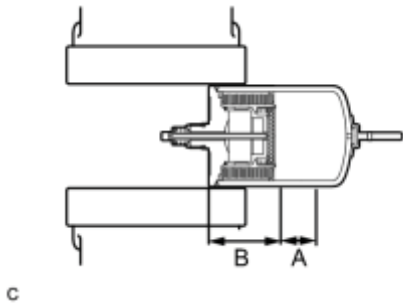
6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

(a) Adjust front wheel alignment **INFO**.

DISPOSAL

1. DISPOSE OF BRAKE BOOSTER PUMP ASSEMBLY

- (a) Remove the accumulator from the brake booster pump assembly.
- (b) Secure the accumulator in a vise.
- (c) Using a hacksaw, make a cut in the side of the accumulator at location [A] to release the high-pressure gas.



| Point | Area |
|-------|-------------------|
| A | 25 mm (0.984 in.) |
| B | 60 mm (2.362 in.) |

CAUTION:

Small pieces of metal may fly out when cutting into the accumulator. Put a cloth over the hacksaw when cutting the accumulator. Cut the accumulator slowly so that the gas will be released gradually.

HINT:

The gas is colorless, odorless and non-poisonous.